

HISTORY

COLLEGE OF MEDICINE

1959 - 1968

CHAPTER 6

DEPARTMENT OF ANESTHESIOLOGY

WILLIAM HAMELBERG, M. D., CHAIRMAN

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HISTORY OF THE DEPARTMENT OF ANESTHESIOLOGY 1959 - 1968

I. Introduction.

Continued growth occurred in the Division of Anesthesiology during the period of 1959 - 1968. In July, 1959, Dr. William Hamelberg was appointed Professor and Director of the Division replacing Dr. J. J. Jacoby. From 1958 to October, 1968, the Division of Anesthesiology was included in the Department of Surgery. In October, 1968, the University established Anesthesiology as a separate Department in the College of Medicine. Dr. Hamelberg was appointed as Professor and Chairman of the new department.

Senior staff of the new department at the University Hospital consisted of Drs. Rollin J. Anderson, James L. Best, Jerome L. Gauthier, Robert W. LeVere, Loren C. Prince, Charles E. Reier, and C. Merle Welch. Children's Hospital had Dr. John P. Garvin as Director with a senior staff of Drs. Aaron C. Canowitz, Lewis T. Franklin, Lester E. Imboden, John B. Siddall, Philip E. Vanik, and E. Jack Warner.

II. Teaching and Academic Program.

The department has responsibility for patient care and teaching at the University Hospital, Children's Hospital and Means Hall. These responsibilities had increased during the ten year period so that approximately 22,000 patients were under the departmental care.

Medical student teaching occurred in all four years. In the first year a lecture in physiology on cardio-respiratory resuscitation was given,

followed in the second year with a series of lectures on the pharmacologic effects of anesthetic agents. In the third year lectures were given on the anesthetic preoperative evaluation of the surgical patient, while in the fourth year the students were given an opportunity to observe and administer anesthesia. However, because of curricular changes in the medical school, the total time the medical students were exposed to anesthesiology was decreased.

Post-graduate education was offered to physicians desiring to specialize in anesthesiology. In addition to the acquiring of special education in the basic and clinical sciences of anesthesiology, these physicians, if they desired, were enrolled in the Graduate School of the University. Up to 1967 they were awarded the degree of Master of Medical Science. Since 1967 the degree awarded was Master of Science.

Master of Medical Science

William Bond, M. D., 1960

Harvey Butt, M. D., 1960

Clyde W. Conger, M. D., 1961

A. Burton Payne, M. D., 1961

Ronald P. Bell, M. D., 1962

William G. Harris, M. D., 1962

Dudley H. Page, M. D., 1962

Donn R. Huf, M. D., 1962

Dorothy W. Jordan, M. D., 1963

Loren C. Prince, M. D., 1965

Arthur A. Tesi, M. D., 1967

Master of Science

Walter G. Moster, M. D., 1968

III. Research Programs and Facilities.

With the opening of the North Wing and Wiseman Hall the research activities of the Department increased. A Director of Anesthesiology Research was established and Dr. Peter P. Bosomworth was the first Director. He resigned in April, 1962 to become the Professor and Chairman of the Department of Anesthesiology at the University of Kentucky Medical School, Lexington, Kentucky. Robert W. Gardier, Ph. D. was appointed July, 1963 to replace Dr. Bosomworth. Dr. Gardier was assisted in the area of research by Charles E. Reier, M. D.

Financial support for the research effort of the Department came mainly from the University Rotary and the Development Fund with very little support from the Federal Government.

The research effort was devoted mainly to evaluating those factors which lead to good patient care. Therefore, the publications had centered around preoperative evaluation of the patient, determining factors which provide safe conduct during anesthesia, and prevention of pulmonary complications. Some investigation into the basic action of anesthetic agents had been conducted by Dr. Gardier and his staff.

Publications from the Department over the period by years are:
1959 - 8; 1960 - 13; 1961 - 9; 1962 - 5; 1963 - 9; 1964 - 7; 1965 - 8; 1966 - 2;
1967 - 10; 1968 - 8. Total publications for the period was 79. For more detailed listing see Appendix I.

IV. BIOGRAPHIES

ANDERSON, ROLLIN J.

B. S., O. S. U., 1956; M. D., *ibid.*, 1960. Instr., 1963-1969;
Asst. Prof., 1969-

BEST, JAMES L.

B. A., O. S. U., 1951; M. D., U. Cincinnati, 1955. Instr., 1962-1968;
Asst. Prof., 1968-

BOSOMWORTH, PETER P.

B. S., Kent State U., 1951; M. D., U. Cincinnati, 1955. Instr. &
Director of Anesthesia Research, 1960-1962.

COLLINS, GEORGE F.

B. A., O. S. U., 1929; M. D., *ibid.*, 1933. Assoc. Prof., 1953-

FRANKLIN, LEWIS T.

A. B., Miami U., 1946; M. D., State U. Iowa, 1951. Instr., 1956-
1968; Asst. Prof., 1968-

GARDIER, ROBERT W.

See Department of Pharmacology

B. S., U. Scranton, 1949; M. S., U. Tennessee, 1952; Ph. D.,
ibid., 1954. Director of Anesthesia Research, 1963-

GARVIN, JOHN P.

B. A., O. S. U., 1941; M. D., U. Cincinnati, 1944. Assoc. Prof.,
1949-

GAUTHIER, JEROME L.

M. D., U. Ottawa, 1954. Instr., 1959-1964; Asst. Prof., 1964-

HAMELBERG, WILLIAM

B. S., Denison U., 1946; M. D., O. S. U., 1948. Prof. & Dir.,
1959-1968; Prof. & Chair., 1968-

IMBODEN, LESTER E.

B. A., Miami U., 1946; M. D., O. S. U., 1950. Instr., 1956-1968;
Asst. Prof., 1968-

JACOBY, J. J.

B. S., U. Minnesota, 1939; M. D., *ibid.*, 1941. Prof. & Dir.,
1947-1959.

JONES, JOHN R.

M. D., U. of Michigan, 1951. Instr., 1954-1956; Asst. Prof.,
1956-1958.

KNISELY, EARL P.

B. A., O. S. U., 1929; M. D., *ibid.*, 1932. Assoc. Prof., 1947-

LENAHAN, NORRIS E.

M. D., O. S. U., 1932. Assoc. Prof., 1942-

LEVERE, ROBERT W.

B. S., O. S. U., 1951; M. D., *ibid.*, 1955. Instr., 1959-1968;
Asst. Prof., 1968-

SIVILS, JIMMY C.

B. S., Oglethorpe U., 1956; M. D., O. S. U., 1960. Instr., 1963-1966; Asst. Prof., 1968.

STETSON, JOHN B.

M. D., Harvard U., 1951. Assoc. Prof., 1967-1968.

RANDALL, ALAN D.

B. A., Trinity Coll., 1941; M. D., Tufts Coll., 1950.
Asst. Prof., 1959-1967.

SIDDALL, JOHN B.

A. B., Oberlin Coll., 1950; M. D., O. S. U., 1956. Instr.,
1959-1968; Asst. Prof., 1968-

WARNER, E. JACK

B. A., O. S. U., 1952; M. D., *ibid.*, 1955. Instr., 1960-1968;
Asst. Prof., 1968-

WELCH, C. MERLE

M. D., U. Louisville, 1943. Instr., 1958-1964; Asst. Prof., 1964-

ZIEGLER, CAROLYN H.

A. B., Mt. Union Coll., 1930; M. D., O. S. U., 1948. Assoc. Prof.,
1952-1959.

INSTRUCTORS

BEAN, HERBERT E.

B. S., Otterbein Coll., 1950; M. D., O. S. U., 1953. Instr., 1960-

CANOWITZ, AARON C.

B. S., O. S. U., 1927; M. D., *ibid.*, 1929. Instr., 1946-

CLAASSEN, LEON G.

B. A., Miami U., 1942; M. D., U. Cincinnati, 1950. Instr., 1956-1962.

DIETSCH, JOHN D.

A. B., Miami U., 1956; M. D., O. S. U., 1960. Instr., 1963.

DURFEY, JOHN Q.

B. A., Amherst Coll., 1950; M. D., Columbia Coll. Physicians & Surgeons, 1954. Instr., 1962-1963.

FLORY, FREDERICK A.

B. A., O. S. U., 1948; M. D., *ibid.*, 1951. Instr., 1954-

JORDAN, DOROTHY W.

B. A., O. S. U., 1947; M. S., *ibid.*, 1948; Ph. D., *ibid.*, 1949; M. D., *ibid.*, 1960; M. M. Sc., *ibid.*, 1963. Instr., 1963-

KINGSBORO, WILSON S.

A. B., Vanderbilt U., 1938; M. D., *ibid.*, 1941. Instr., 1960-1965; d. 1965.

KOENIG, JAMES W.

B. A., O. S. U., 1949; M. A., *ibid.*, 1950; M. D., *ibid.*, 1954. Instr., 1959-

MATSON, JAMES E.

B. A., O. S. U., 1946; M. D., *ibid.*, 1950. Instr., 1955-

PRINCE, LOREN C.

B. A., O. S. U., 1959; M. D., *ibid.*, 1962; M. M. Sc., *ibid.*, 1965. Instr., 1968-

SAMONTE, AUGUSTO

M. D., U. Philippines, 1947. Instr., 1957-1958.

REIER, CHARLES E.

B. S., O. S. U., 1957; M. D., Jefferson Med. Coll., 1963. Instr., 1966-

TREECE, FLORIN D.

B. S., O. S. U., 1953; M. D., *ibid.*, 1957. Instr., 1967-

TRUDEAU, GWENDOLYN C.

B. A., O. S. U., 1946; M. D., *ibid.*, 1949. Instr., 1953-

VANIK, PHILIP E.

B. A., Kent State U., 1956; M. D., O. S. U., 1960. Instr., 1966-

WARNER, LOUISE O.

B. S., O. S. U., 1951; M. D., *ibid.*, 1955. Instr., 1960-

WOOLLEY, ANDREW P.

B. S., Otterbein Coll., 1942; M. D., Coll. Med. Evangelists, 1951. Instr., 1959.

ZIEGLER, JOHN B.

M. D., O. S. U., 1955. Instr., 1958-1959.

APPENDIX I

PUBLICATIONS

1. Jacoby, J., Ziegler, C., Woolley, A. and Ray, H.: The Treatment of Respiratory Emergencies. Postgraduate Medicine, 25:372, 1959.
2. Jacoby, J., Jones, J., Ziegler, J., Claassen, L., and Garvin J.: Pneumocephalography and Air Embolism: Simulated Anesthetic Death. Anesthesiology, 20:336, 1959.
3. Hamelberg, W., and Jacoby, J.: Shoulder-Hand Syndrome: Treatment with Stellate Ganglion Block. J. So. Carolina Med. Assn., 55:2, 1959.
4. Hamelberg, W., Siddall, J. and Claassen, L.: Perforation of Dura by a Plastic Catheter During Continuous Caudal Anesthesia. Arch. Surg. 78:357, 1959.
5. Jacoby, J., Woolley, A., Ray, H., Muller, H., and Welch, C.: The Role of the Family Doctor in Preventing Anesthetic Deaths. Medical Times 87:760, 1959.
6. Jacoby, J.: Local Anesthetic Reactions: Case Report. Health Center J. 9:42, 1959.
7. Hamelberg, W. and Jacoby, J.: Pneumohemothorax Following Brachial Plexus Block. Anesth. & Analg. 38:251, 1959.
8. Conger, C. and Omer, G. E., Jr.: Osteochondrosis of the Capitulum Humeri (Panner's Disease). U. S. Armed Forces Med. J. 10 (Oct.) 1959.
9. Hamelberg, W.: Incompatibilities of Modern Drug Therapy and Anesthesia. O. S. M. J. 56:190, 1960.
10. Hamelberg, W., Jacoby, J. and Garvin, J.: Control of Anesthetic Depth During Balanced Anesthesia. Anesth. & Analg. 39:275, 1960.

11. Hamelberg, W., Sprouse, J. H., Mahaffey, J. E., and Richardson, J. A.:
Catechol Amine Levels During Light and Deep Anesthesia. Anesthesiology,
21:297, 1960.
12. Hamelberg, W., Sprouse, J. H., Mahaffey, J. E., and Richardson, J. A.:
A Method of Clinically Evaluating Muscle Relaxants. Anesthesiology,
21:102, 1960.
13. Hamelberg, W., Sprouse, J. H., Mahaffety, J. E., and Richardson, J. A.:
Plasma Levels of Epinephrine and Norepinephrine - Anesthetic
Significance. J. A. M. A. 172:596, 1960.
14. Garvin, J., Jacoby, J., Ziegler, C., and Macpherson, C. R.: The Anesthes-
iologist and Hospital Infections. Anesth. & Analg. 39:75, 1960.
15. Hamelberg, W., Mentges, W., and Dindot, J.: The Crushed Chest Injury
and the Anesthesiologist. J. A. M. A. (Nov.) 1960.
16. Hamelberg, W., Jacoby, J., and Jones, J.: Hypersplenism as an Anesthetic
Consideration. Anesth. & Analg. 39:527, 1960.
17. Hamelberg, W.: The Patient and General Anesthesia, Levels, Planes,
Preop Medication and Preparation. The Third Annual Orthopedic
Basic Science Course, The Ohio State University, 1960.
18. Claassen, L.: Cardiac Arrest - Anesthesia Emergencies. The Third Annual
Orthopedic Basic Science Course, The Ohio State University, 1960.
19. Koenig, J., Marx, G., and Orkin, L.: Dilutional Hypervolemia During
Transurethral Resection of the Prostate. J. A. M. A. 174:1834, 1960.
20. Koenig, J.: Case Report - Complications of Continuous Anesthesia for
Vaginal Delivery. OSA News Letter, Vol. III, No. 5, 1960.

21. Randall, A.: Pharmacology of Agents Used in Anesthesia Absorption, Excretion, Etc. The Third Annual Orthopedic Basic Science Course, The Ohio State University, 1960.
22. Hamelberg, W., Butt, H. R., Jr., and Jacoby, J.: Hiccough: Its Possible Cause and Treatment in Anesthesia. Anesth. & Analg. 40:181, 1961.
23. Hamelberg, W. and Gauthier, J.: Deterioration of Spinal Needles. Anesthesiology, 22:493, 1961.
24. Butt, H. R., Jr., Garvin, J.: A Study of Gastric Contents in 67 Children Undergoing Elective Surgery. Anesth. & Analg. 40:331, 1961.
25. Garvin, J.: Case Report - Hypothermia Following Cerebral Anoxia. OSA News Letter, Vol. IV, No. 1, 1961.
26. Garvin, J.: Case Report - Cardiac Asystole During Otoplasty. OSA News Letter, Vol. IV, No. 2, 1961.
27. Hamelberg, W., Conger, C., and Claassen, L.: Control of Postop Nausea and Vomiting -- A Double Blind Study of Perphenazine (Trilafon). O.S.M.J. 57:897, 1961.
28. Hamelberg, W., Bond, W., and Mahaffey, J.: Nitrous Oxide Impurities. Anesth. & Analg. 40:408, 1961.
29. Bosomworth, P.: Block of the Brachial Plexus in the Axilla: Its Value and Complications. Ann. Surg. 154:911, 1961.
30. Dysart, R.: Management of Tetanus - Case Report. OSA News Letter, Vol. IV, No. 4, 1961.
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32. Hamelberg, W., Dysart, R., and Bosomworth, P.: Perivascular Axillary Versus Supraclavicular Brachial Plexus Block and General Anesthesia. Anesth. & Analg. 41:85, 1962.

33. Gauthier, J., Bosomworth, P., Page, D., Moore, F., and Hamelberg, W.:
Effect of Endotracheal Intubation on EKG Patterns During Halothane
(Fluothane) Anesthesia. Anesth. & Analg. 41:466, 1962.
34. Payne, A. B., Claassen, L., Hamelberg, W.: Hydroxyzine As a
Premedicating Drug. O.S.M.J. 38:915, 1962.
35. Nikolovski, Z.: Countershock for Ventricular Tachycardia. OSA News Letter
Vol. V., No. 4, 1962.
36. Hamelberg, W., Bosomworth, P., and Pevaroff, S.: The Circulatory
Effects of IV Trimethobenzamide Hydrochloride (Tigan), Perphenazine
(Trilafon), and Prochlorperazine (Compazine). J. Oral Surg., Anes.,
Hos. Ser. 21:24, 1963.
37. Hamelberg, W., Roche, W., Wallace, W., and Poindexter, J.: Anesthetic
Management of Maxillofacial Injuries. Anesth. & Analg. 42:43, 1963.
38. Hamelberg, W. and Bosomworth, P.: An Evaluation of the Ephedrine Test.
J. A. M. A. 183:142, 1963.
39. Bosomworth, P., Egbert, L., and Hamelberg, W.: Block of the Brachial
Plexus in the Axilla: Its Value and Complications. Survey of Anesthesiology
7:140, 1963.
40. Hamelberg, W.; Bosomworth, P. and Dietsch, J.: The Effect of Controlled
Hemorrhage on Heart Sounds and the Magnitude of the Peripheral Pulse.
Anesth. & Analg. 42:131, 1963.
41. Gardier, R. W.: Difference Between Dog and Man in Blood Barbiturate Levels
Necessary for Induction of Anesthesia. Pharmacologist, 5:234, 1963.
42. Gardier, R. W.: Mechanism Whereby Halothane Reverses the Pressor
Responses to Acetylcholine. Brit. J. Pharmacol., (June) 1963.

43. Gardier, R. W.: Vasodepression Induced by Acetylcholine in the Atropinized Dog. Brit. J. Pharmacol., (June) 1963.
44. Hamelberg, W., and Gauthier, J.: Hip Fractures -- Influence of Anesthesia on Patient's Hospital Course. Anesth. & Analg. 42:609, 1963.
45. Hamelberg, W.: Current Concepts on Antihypertensive Drugs and Steroids. Anesth. & Analg. 43:104, 1964.
46. Jordan, D., Lavin, T., and Hamelberg, W.: Resuscitation Experience Within the Hospital. J. A. M. A. 188:181, 1964.
47. Gardier, R., Traber, D.: An Afferent Component in the Acetylcholine Pressor Response. Fed. Proc. 23:232, 1964.
48. Gardier, R.: Discussion - Anesthesia and Digitalis Toxicity: Experimental Study. Anesth. & Analg. 43:518, 1964.
49. Gauthier, J., Marks, B., Dutta, S. and Elliott, D.: Distribution in Plasma Uptake by Heart and Excretion of Ouabain-H³ in Human Subjects. J. Pharmacol. & Exper. Ther. 145:351, 1964.
50. Hamelberg, W. and Bosomworth, P.: Aspiration Pneumonitis: Experimental Studies and Clinical Observations. Anesth. & Analg. 43:669, 1964.
51. Warner, L. and Smith, B.: Before Transferring a Newborn Infant for Surgery: A Check List of Do's and Don'ts. J. Amer. Med. Women's Assoc. 19:1057, 1964.
52. Hamelberg, W.: Effect of Sterilization Technics on Safety and Durability of Endotracheal Tubes and Cuffs. Anesth. & Analg. 44:5, 1965.
53. Hamelberg, W.: Inhalation of Gastric Contents. G. P. (Sept.), 1965.
54. Mahaffey, W. B., Hamelberg, W. and Gardier, R. W.: Arfonad Response As an Index of Effective Blood Volume. Fed. Proc. 24:364, 1965.

55. Gardier, R. W.: Vasopressin Vasodynamics: I. The Pharmacology of Tachyphylaxis. Arch. int. Pharmacodyn. 153:232, 1965.
56. Gardier, R. W.: Vasopressin Vasodynamics: II. The Pathophysiology of Hypertension. Arch. int. Pharmacodyn. 153:240, 1965.
57. Prince, L.: Effect of Anesthesia on Liver Enzymes, Guanase and Ornithine. Anesthesiology, 26:258, 1965.
58. Gardier, R. W. and Traber, D. L.: Activity of Splanchnic Nerve and Carotid Chemoreceptors in the Origin of Pressor Response to Acetylcholine. J. Pharmacology, 150:75, 1965.
59. Traber, D. L., Carter, V. L. and Gardier, R. W.: Effect of N, N-di-isopropyl-N-isoamyl-N'diethylaminoethyl Urea (P-286) on Activity Induced in the Superior Cervical Ganglion. Fed. Proc. 25:227, 1966.
60. Welch, C. M.: "Anesthesia and Analgesia" and "Infant Resuscitation" Two Chapters for TEXTBOOK OF OBSTETRICS by Hollenbeck and Ullery, published by Mosby Co., 1965.
61. Traber, D. L., Gary, H. H., and Gardier, R. W.: The Involvement of the Sympathetic Nervous System in the Pressor Response to Vasopressin. Arch. int. Pharmacodyn. 168:288, 1967.
62. Traber, D. L., Leveine, L. H. and Gardier, R. W.: Incrimination of Catecholamines in the Pressor Response to Vasopressin. The Pharmacologist. 8:192, 1966.
63. Gardier, R. W., Endahl, G. L., and Hamelberg, W.: Cyclopropane: Effect on Catecholamine Biotransformation. Anesthesiology, 28:677, 1967.
64. Reier, C. E.: Intra-gastric Cyclopropane - A Potential Explosion Hazard. Anesthesiology, 28:771, 1967.

65. Traber, D. L., Carter, V. L., Jr., and Gardier, R. W.: Regarding
a Necessary Condition for Ganglionic Blockade and Competitive Agents.
Arch. int. Pharmacodyn. 168:339, 1967.
66. Hamelberg, W.: Preventing Cross-contamination and Saving Money.
The Nation's Hospitals and Nursing Homes. No. 2, pg. 17, 1967.
67. Traber, D. L., Gary, H. H., and Gardier, R. W.: The Involvement of the
Sympathetic Nervous System in the Pressor Response to Vasopressin.
Arch. int. Pharmacodyn. 168:288, 1967.
68. Gardier, R. W., Reier, C. E., Traber, D. L., Rowe, H. M., and
Hamelberg, W.: Elevated Plasma Norepinephrine during Cyclopropane
Anesthesia as a Possible Function of Decreased Amine Metabolism.
Anesth. & Analg. 46:800, 1967.
69. Hamelberg, W. and Bosomworth, P.: ASPIRATION PNEUMONITIS,
Charles Thomas, publisher, 1967.
70. Carter, V. L., Jr., Traber, D. L. and Gardier, R. W.: Investigation
of Sympathetic Activity from a Dose of Acetylcholine Producing a
Hypertensive Response. J. Pharmacol. 156:232, 1967.
71. Rowe, H. M., Traber, D. L. and Gardier, R. W.: Effect of an Amino-
alkylurea (P-286) on Chemoreceptor Activity. Fed. Proc. 26:213, 1967.
72. Stetson, John B. and Townsend, G. L.: Treatment of Carbon Monoxide
Poisoning by Mechanical Ventilation: Case Report. Can. Anaesth. Soc. J.
15:184, 1968.
73. Stetson, J. B.: A Simple Improvement in the EMO Vaporizer. Brit. J.
Anaesth. 40:65, 1968.
74. Guess, W. L. and Stetson, J. B.: Tissue Reactions to Organotin-Stabilized
Polyvinyl Chloride (PVC) Catheters. J. A. M. A. 204:580, 1968.

75. Gardier, R. W. and Hamelberg, W.: Effect of Anesthetic Agents on Catecholamine Biotransformation. Chapter 18 - SYMPOSIUM ON TOXICITY OF ANESTHETIC AGENTS. B. R. Fink, ed., Williams and Wilkins Co., Baltimore, pp 209-219, 1968.
76. Traber, D. L., Gardier, R. W. and Wilson, R. D.: Elevations in Blood Pressure Associated With the Endogenous Release of Vasopressin. The Pharmacologist 10:157, 1968.
77. Tesi, J., Reier, C. E., Gruber, J., Johnstone, R. and Gardier, R. W.: In Vitro Response to Sympathomimetics After Alpha Adrenergic Blockade with Droperidol (Dihydrobenzperidol). The Pharmacologist, 10:206, 1968.
78. Gardier, R. W. and Rohrer, B.: Sex Specific Diuresis. Proc. Soc. Exp. Bio. Med. 127:405, 1968.
79. Bernard, P. J., Rowe, H. M. and Gardier, R. W.: Influence of Vasopressin on Postganglionic Nerve Stimulation in the Isolated Cat Spleen. Arch. int. Pharmacodyn. 171:217, 1968.